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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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HEWLETT PACKARD COMPANY
P O BOX 272400
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS CO 80527-2400

EXAMINER

LUU.T

ART UNIT

PAPER NUMBER

2878

DATE MAILED:

09/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/220,736

Applicant(s)

BOHN, DAVID D.

Examiner

Thanh X Luu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 3, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 and 11, "the object side surface" lacks proper antecedent basis.

Claims 3 and 12 are indefinite by virtue of their dependency on an indefinite claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Strother (U.S. Patent 4,233,501).

Regarding claims 1 and 2, Strother discloses (see Figures 1 and 2) an optical system for forming an image of at least a portion of an illuminated area on an object, the

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illuminated area being characterized by at least one brightly illuminated region (76) and at least one less brightly illuminated region (22), comprising: a lens (12) or lens means positioned a spaced distance from the illuminated area on the object, the lens having an image side focal plane; an aperture stop (18) or telecentric aperture stop positioned so that it is substantially co-planar with the image side focal plane of the lens; and an occluding element (15, 17 or 19) or an occluding means that blocks a predetermined amount of light from the brightly illuminated region but does not substantially block light from the less brightly illuminated region. The occluding means is disposed adjacent the object side of the lens.

5. Claims 1, 2, 4, 5, 8-11, 13, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwerdt et al (U.S. Patent 3,214,596).

Regarding claims 1 and 8, Schwerdt et al disclose (see the Figure) an optical system for forming an image of at least a portion of an illuminated area on an object (11), the illuminated area being characterized by at least one brightly illuminated region (stray light, not shown) and at least one less brightly illuminated region (12 or absence of 12), comprising: a lens (49) or lens means positioned a spaced distance from the illuminated area on the object, the lens having an image side focal plane; an aperture stop (39) or telecentric aperture stop positioned so that it is substantially co-planar with the image side focal plane of the lens; and an occluding element (48, 51 and surrounding housing) or an occluding means positioned between the lens and the illuminated area on the object so that the occluding element blocks a predetermined

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amount of light from the brightly illuminated region but does not substantially block light from the less brightly illuminated region.

Regarding claim 9, Schwerdt et al disclose (see the Figure) a method of forming an image of at least a portion of an illuminated area on an object, the illuminated area being characterized by at least one brightly illuminated region and at least one less brightly illuminated region, comprising: positioning a lens (49) a spaced distance from the illuminated area on the object, the lens having an image side focal plane; positioning an aperture stop (39) at about the image side focal plane of the lens; and blocking (with the angled lens and housing) a predetermined amount of light from the brightly illuminated region before the light from the brightly illuminated region is refracted by the lens.

Regarding claims 10 and 17, Schwerdt et al further disclose (the Figure and see column 2, lines 54-59) a detector (36) and using the signal from the detector to control an automatic conveyor system. Thus, some sort of navigation system is controlled by the detection signal.

Regarding claims 2 and 11, Schwerdt et al disclose the occluding element disposed adjacent an object side surface of the lens.

Regarding claims 4 and 13, Schwerdt et al disclose a window (see the Figure) positioned between the lens and the illuminated area on the object, the window having an object side surface and a lens side surface.

Regarding claims 5 and 14, Schwerdt et al disclose the occluding element (walls of the housing) positioned adjacent the lens side of the surface of the window.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 7, 10-12 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Strother (U.S. Patent 4,233,501).

Regarding claims 10 and 11, Strother does not disclose a navigation system. However, tracking systems are notoriously well known in the art, and it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the detection signals of Strother in order to navigate or track a target object thus, automating the process.

Regarding claims 3 and 12, Strother does not disclose the occluding element deposited on the lens. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to deposit the element on the lens in order to provide a more integral and compact device.

Regarding claims 7 and 16, Strother does not explicitly disclose the shape of the occluding element. However, the shape is a simple matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to choose a circular shape in order to obtain a desired result.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seungsook Ham, can be reached on (703) 308-4090. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl

September 5, 2000



Que T. Le
Primary Examiner